REMARKS

Claims 1-26, including independent Claims 1, 13, 22 and 23, were pending in the subject application. Claim 7 stands allowable but objected to, and all others stand rejected. After entry of the amendment herein, Claims 1-26 remain pending, including independent Claims 1, 13, 22 and 23.

Amendment

Independent claims 1, 13 and 22 are amended in response to claim objections set forth by the Examiner in section 4 of the current Office Action, and Claims 13 and 22 are further amended.

No new matter is added by the present amendment. The amendment to Claim 1 does not change the meaning or scope of the claim, and is therefore self-supporting. One amendment to Claim 13 is similarly self-supporting, and the other is supported by, for example, Claim 15 as originally filed. One amendment to Claim 22 is similarly self-supporting, while the amendments to clauses 'a' and 'b' are supported, for example, by Claims 1, 5 and 6 as previously presented, and by the embodiments disclosed in the subject application that support those claims.

Double Patenting Rejection

In section 6 of the current Office Action the Examiner reiterates an earlier double patenting rejection. Applicants respectfully repeat their previous request (acknowledged by the Examiner in section 3 of the current Office Action) to hold this matter in abeyance pending a determination of allowability, at which time a terminal disclaimer will be executed if deemed necessary.

U.S. Patent 5,999,816 to Tiedemann ("Tiedemann") Does Not Anticipate Claim 23

In section 8 of the current Office Action, the Examiner rejects Claims 23 and 24 as anticipated by Tiedemann. This rejection is respectfully traversed.

Claim 23 requires, in part (underlining added for emphasis):

a) first receiving, at a subject mobile station, a message from the serving base station directing performance of a handoff to the target base station; and thereafter

b) monitoring a first parameter reflective of a signal received by the subject mobile station from the serving base station;

c) monitoring a second parameter reflective of a signal received by the subject mobile station from the target base station;

d) comparing current values of the first parameter to corresponding values of the second parameter;

The Examiner contends that Tiedemann teaches the features required by clause 'b' of Claim 23. In particular, the Examiner contends that, in Tiedemann, the parameter defined in clause 'b' of Claim 23 is MIN_TOT_PILOT (step 60 of Fig. 5), or Ec/Io of MIN_RX_PWR (steps 1106, 1108 or 1112 of Fig. 7A). This contention is incorrect. The Examiner cites specific portions of Tiedemann to support his contention, but the cited portions in fact support a contrary conclusion. The parameters MIN_TOT_PILOT and MIN_RX_PWR are not "reflective of a signal from the serving BS," as required by clause 'b' of Claim 23. Tiedemann mentions three methods by which the MS can obtain these parameter values (*see* col. 5 lines 51-57, col. 7 lines 20-24, and col. 12 lines 39-40). However, in stark contrast to Applicants' inventive method as described in Applicants' specification and set forth in Claim 23, none of the methods taught by Tiedemann suggests that the parameters "are reflective of a signal from the serving BS," or are in any way based on a signal received from the serving BS. The three methods merely suggest that the MS might obtain the values from the serving BS, or from the target BS (or system S2), or that the MS might generate the values from unspecified "system data."

Thus, the parameters identified by the Examiner fail to constitute examples of the features required by clause 'b' of Claim 23. Nor has the Examiner merely misidentified the parameter: Tiedemann simply includes no suggestion of monitoring any signal from the serving BS, after the EHDM is sent, that could reasonably be "reflected" by a parameter to be compared for determining when to initiate a reverse-link handoff. Instead, only signals of the target BS(s) are monitored.

The target BSs to which the MS will be handed off are the Active Set for the new frequency, which is specified in the Extended Handoff Direction Message (EHDM) sent to the MS from the serving BS (*see* col. 9 lines 39-45). Note lines 42-45 in particular: "Following that message, in **58**, the mobile station tunes to the new frequency and attempts to acquire the destination system according to the Active Set information in the EHDM message." Thus, immediately following the EHDM, the MS changes frequency and seeks to tune in the new Active Set. Following the EHDM, there is no monitoring of parameters reflecting signals from the original (serving) BS, but only of the signals of the new Active Set ... *i.e.*, signals of the target BSs.

To support the contention that Tiedemann suggests the limitations set forth in clause 'b' of Claim 23, the Examiner points to the text of Tiedemann at col. 9 lines 39-42, col. 5 lines 50-60, col. 6 lines 23-25 and 40-49, and at col. 14 lines 20-26 and 45-50. The Examiner also states: "[N]ote that the minimum power or Ec/Io is the power/signal strength that transmits [sic] by the origination base station which is monitored/observed/measured and operated [on] at the mobile station."

As described in the remarks above, the parameters MIN_TOT_PILOT and MIN_RX_PWR are not "reflective of a signal from the serving BS," as required by clause 'b' of Claim 23. Instead, there is no suggestion of any signal that they might reflect, and the relevant "monitored" signals are those of the new Active Set, *i.e.*, the target BS. The remainder of the Tiedemann description proposed by the Examiner as teaching or suggesting clause 'b' of Claim 23 is examined below.

Col. 5 lines 50-60 of Tiedemann describes alternative methods by which an MS may acquire and retain values for MIN_TOT_PILOT and MIN_RX_PWR. None of these alternative methods include a suggestion that the parameters should be "reflective of a signal received by the subject mobile station from the serving base station." At col. 6 lines 23-25, Tiedemann describes that the MS, after failing to find the predicted new pilots, makes a measurement of total received power. Arguably this measurement is a form of monitoring, but only of signals received from the target BS(s). Col. 6 lines 40-49 describes a scenario for a third MS, "M3," which fails to find the predicted pilots but does determine that sufficient total power is arriving. Again, this is a form of monitoring, however, it is monitoring only of signals received from the target BS(s). Col. 14 lines 20-26 describes information that the MS reports upon returning to the serving BS when a handoff is incomplete. The Ec/Io measurements referred to in that section are of target BS signals, contrary to the "Note" of the Examiner, which asserts that they are of signals from the "origination base station." The Examiner provides no citation for his "Note," and no support for his note can be found by the undersigned. Col. 14 lines 45-50 is a description of steps 1106-1108 of FIG. 7A, and supports the Applicants' assertion that the measurements by the MS are of signals of the target BSs at the new frequency F2, *i.e.*, the target BS(s).

As detailed in the remarks set forth above, Tiedemann fails to teach that an MS, after receiving a handoff direction message, monitors a parameter reflective of a signal received from the serving BS. In the absence of such monitored parameter, it can clearly not be compared to another parameter as required by clause 'd' of Claim 23. Further, because such comparison cannot be performed, Tiedemann also fails to suggest initiating a reverse-link portion of the handoff on the basis of such comparison. Thus, the remarks set forth above lead to the logical conclusion that Tiedemann entirely fails to anticipate Claim 23, failing to teach several different limitations recited therein.

Furthermore, at least for the reasons set forth above, dependent Claim 24 is also rendered nonobvious over any combination of the cited prior art at least by virtue of properly depending from a nonobvious claim (*i.e.*, Claim 23).

Combination of Tiedemann with Ramakrishna

In section 10 of the current Office Action, the Examiner also relies upon Tiedemann in view of US Patent 6,233,455 to Ramakrishna, et al. (Ramakrishna), to reject each of the Applicants' other independent Claims 1, 13 and 22.

Ramakrishna describes techniques for generating a pilot strength measurement message (PSMM; see, *e.g.*, Abstract and Summary of the Invention). A PSMM is sent from an MS to a serving BS, which thereafter decides whether or not to send a handoff direction message (HDM) back to the MS by way of response. In regard to what transpires after an HDM is sent to the MS from a serving BS, Ramakrishna (col. 2 lines 3-12) states that "[t]he mobile, on receiving the message, will add this new sector to the active set utilizing the parameters provided in the HDM and acknowledge via a third message, the Handoff Completion Message (HCM)." Thus, the handoff proceeds immediately, and no suggestion is made for monitoring a parameter reflective of the serving BS after the HDM is sent. See also col. 2 lines 18-19 and 64: "The HDM and HCM follow in order as explained above." Once an HDM is sent, no further processing is required or suggested. Instead, after the HDM, the MS proceeds directly to add the target BS to its Active Set.

Stated simply, Ramakrishna involves events that precede a PSMM, which precedes an HDM. In stark contrast, the Applicants' invention involves events that are subsequent to an HDM. As amended, clauses b-f of Claim 1, most of clause 'b' of Claim 13, clauses a-d of Claim 22, and clauses b-f of Claim 23 all recite events that are explicitly subsequent to a message directing a handoff.

Thus, Ramakrishna, fails to disclose, teach, or fairly suggest "monitoring a first parameter reflective of a signal received by the subject mobile station from the serving base station," as required by clause 'b' of amended Claim 1. The failure of Tiedemann to teach this limitation is described above with respect to clause 'b' of Claim 23, which is identical to clause 'b' of amended Claim 1. As such, a combination of Ramakrishna with Tiedemann fails to teach or suggest all of the elements required by amended Claim 1, and thus does not support a *prima facie* case of obviousness with regard to amended Claim 1. Indeed, the combination fails to teach several limitations of amended Claim 1, including at least those that depend on the parameter defined in clause 'b.'

Claim 13 is an apparatus claim. Nonetheless, Tiedemann and Ramakrishna fail to teach, disclose, or suggest the limitations set forth in amended Claim 13, such as those set forth below, for reasons similar to those set forth above with respect to Claim 23. Claim 13, as presently amended, recites in part (underlining added for emphasis):

> a) a pilot strength reporting block for sending a pilot strength measurement message (PSMM) to the serving base station when a first parameter

associated with the target base station is greater than a threshold parameter "T_Add"; and

b) a reverse link handoff control block configured to implement a reverse link intergenerational hard handoff when, after the serving base station transmits an intergenerational handoff direction message to the mobile station, a second parameter describing a characteristic of a signal from the serving base station is less than or equal to a sum of a current value of the first parameter and an offset;

Claim 13 previously recited that the second parameter was "associated with" the serving base station. Even if combined, Tiedemann and Ramakrishna fail to disclose, teach, or fairly suggest all of the limitations of Claim 13, as presently amended, for reasons very similar to those set forth above with respect to Claims 1 and 23. That is, for comparison to determine when to initiate or complete a reverse-link handoff, both references fail to teach "a second parameter describing a characteristic of a signal received from the serving base station." Failure to teach other limitations follows from this initial failure, if only because such other limitations rely upon this first limitation.

Claim 22, as presently amended, recites in part (underlining added for emphasis):

a) a first set of instructions for monitoring, after the subject mobile station has been directed to initiate the handoff to the target base station, a first parameter reflective of a signal received by the subject mobile station from the serving base station;

b) a second set of instructions for monitoring, after the subject mobile station has been directed to initiate the handoff to the target base station, a second parameter reflective of a signal received by the subject mobile station from the target base station;

c) a third set of instructions for determining if the first parameter is less than or equal to a sum of the second parameter and an offset; and

d) a fourth set of instructions for initiating the reverse link handoff between the serving and target base stations if the first parameter is less than or equal to the sum of the second parameter and the offset;

Clause 'a' of Claim 22, as presently amended, includes limitations similar to the limitations of clause 'b' of Claims 1 and 23. As such, the failure of both Tiedemann and Ramakrishna to teach or suggest the features recited in clause 'a' of Claim 22, as presently amended, is readily apparent from

the remarks set forth above in regard to Claims 1 and 23. Also for similar reasons, the failure of the combination of references to teach or suggest the limitations of clause 'a' cause the combination to fail to teach the limitations of other clauses, such as clauses 'c' and 'd.'

The remarks set forth above amply demonstrate that both Tiedemann and Ramakrishna fail to disclose several limitations of each of the independent Claims 1, 13, 22 and 23. As such, a combination of these two references cannot support a *prima facie* case of obviousness for any of the independent claims. An included consequence of this is that neither of the cited references, taken alone, anticipates any of the independent claims, as presently amended. Accordingly, the remarks above support a conclusion that all of the independent claims, as presently pending, are nonobvious over the cited prior art. Because all of the other pending claims properly depend from one of the independent claims, each and every pending claim has been shown to be nonobvious over the cited prior art, at least by virtue of dependency.

Conclusion

The foregoing remarks demonstrate that, even if combined, the cited references fail to support a *prima facie* case of obviousness for any of the independent claims. Each other claim properly depends from one such independent claim, and thus it is respectfully submitted that each claim, as presently pending in the subject application, is novel and nonobvious and in condition for immediate allowance. As such, the Examiner is respectfully requested to withdraw each of his grounds for rejection, and to promptly issue a Notice of Allowance in respect of all pending claims.

The Commissioner is authorized to construe this paper as including a petition to extend the period for response by the number of months necessary to make this paper timely filed. Fees or deficiencies required to cause the response to be complete and timely filed may be charged, and any overpayments should be credited, to our Deposit Account No. **50-0490**.

Respectfully submitted,

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William C. Boling
Registration No. 41,625

JAQUEZ & ASSOCIATES
6265 Greenwich Drive, Suite 100D
San Diego, California 92122-5916
(858) 453-2004 (TEL)
(858) 453-1280 (FAX)
E-mail: barbara@jaquez-associates.com; bill@jaquez-associates.com